### **UW Autism Center**

"Dedicated to improving the lives of individuals with autism and their families through intervention, education, professional training, and research aimed at effective treatments, prevention, and cure."

Geraldine Dawson, PhD January 4, 2006

## Motivating factors for establishing the Autism Center

- Dearth of services
- Need for evidence based approaches to treatment
- Wait-lists across major centers and community providers
- Critical need for professional training

### **UW Autism Center Mission**

- Established in 2000 based on \$10 million endowment
- Second site established in Tacoma in 2003
- Provide state-of-the-art coordinated clinical services for children birth to late adolescence
- Increase capacity for services in the community through training
- Increase public awareness and education about autism through informational and outreach activities
- Serve children birth through 18 years of age

### Model based on Published Practice Guidelines

### Intervention priorities:

- Functional spontaneous communication
- Social instruction delivered throughout the day in various settings
- Cognitive development and play skills
- Proactive approaches to behavior problems
- Address speech and motor impairments
- Inclusion of family and parent training

### Address medical issues

- Associated medical conditions such as GI, sleep, seizures
- Associated psychiatric conditions such as depression, anxiety

# NRC Recommendations Regarding Early Intervention

- Services begin as soon as autism is suspected
- Services should include a minimum of 25 hours per week, 12 months per year
- Systematically planned, developmentally appropriate intervention directed toward identified objectives
- Multi-disciplinary approach

### **Comprehensive Care Model**

- Pediatrics
- Psychiatry
- Psychology
- Applied behavior analysis
- Speech/language
- Occupational therapy
- Gastroenterology
- Sleep specialist
- Referrals and collaboration

## Joined Autism Treatment Network in 2005

- The Autism Treatment Network (ATN) is a national nonprofit organization designed to support collaboration to improve treatment for autism.
- ATN is the nation's first network of autism centers focusing on the study and advancement of treatment for individuals with autism.
- ATN will help develop treatment guidelines on the care of individuals with autism.
- Participating Centers:

Baylor College of Medicine, Houston, TX
Cleveland Clinic, Ohio
Columbia University Medical School, NY
Kennedy Krieger Institute, Johns Hopkins University
Massachusetts General Hospital for Children
Oregon Health & Science University
University of Washington, Seattle

### **Autism Treatment Network**

- Collaboration with medical specialists in GI, sleep, genetic/metabolic disorders
- Monthly clinic with specialists
- Data base of patients will be established
- Treatment guidelines established

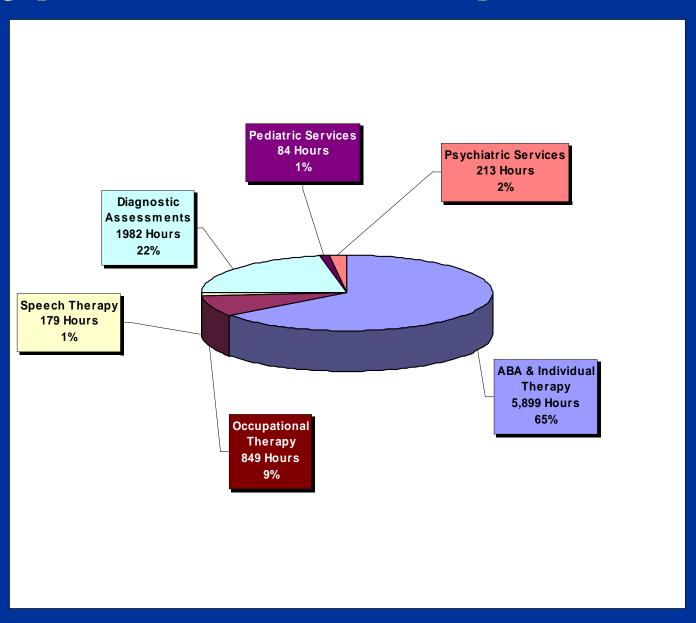
### **Current Clinical Staff**

- Psychologists
  - 5 Licensed psychologists (clinical, neuropsychology, school)
  - 3 Postdoctoral psychology fellows
  - 2 Pre-doctoral psychology interns
- Physicians
  - 1 Developmental Behavioral Pediatrician
  - 1 Pediatric Fellow
  - 2 Child-Adolescent Psychiatrists
  - 2 Child Psychiatry Fellows
  - 1 Pediatric Gastroenterologist
  - 1 Pediatric Sleep specialist
- Speech-Language and OT
  - 2 Speech-Language Pathologists
  - 1 Occupational therapist
- Behavior analysts
  - 1 doctoral-level Board Certified Behavior Analyst (BCBA)
  - 5 Master's-level BCBA Autism Consultants

# Total services provided annually July, 2004 – June 2005

- > 600 families served by Center staff
- 9,206 hours of clinical service provided
- 5,899 hours of behavioral intervention provided to families

### Types of services provided



### **Continuity of Care**

### Diagnosis and assessment

- Etiology
- Medical issues
- Intervention plan
- Referrals and resources

#### **Infant-Preschool**

- Early intervention
- Consultation to Birth-to-three and preschool
- Consultation to Primary Care Physician
- Transition Planning

### Elementary school age

- On-going behavior support
- Social skills training
- Consultation regarding educational plan
- Transition planning

#### Adolescence

- Peer relationships, identity, sexuality
- Psychiatric and other medical issues
- Educational consultation
- Vocational
- •Transition planning

### UW Autism Center: Early Intervention Best Practices Model

- Emphasis of applied behavior analysis, but also includes other empirically supported approaches
- Individualized: tailored to family and child's needs
- Focus on generalization and naturalistic strategies
- UW staff train TA's and parents to implement programs with each child
- Assess child's progress via data collection and make changes to programs on regular basis

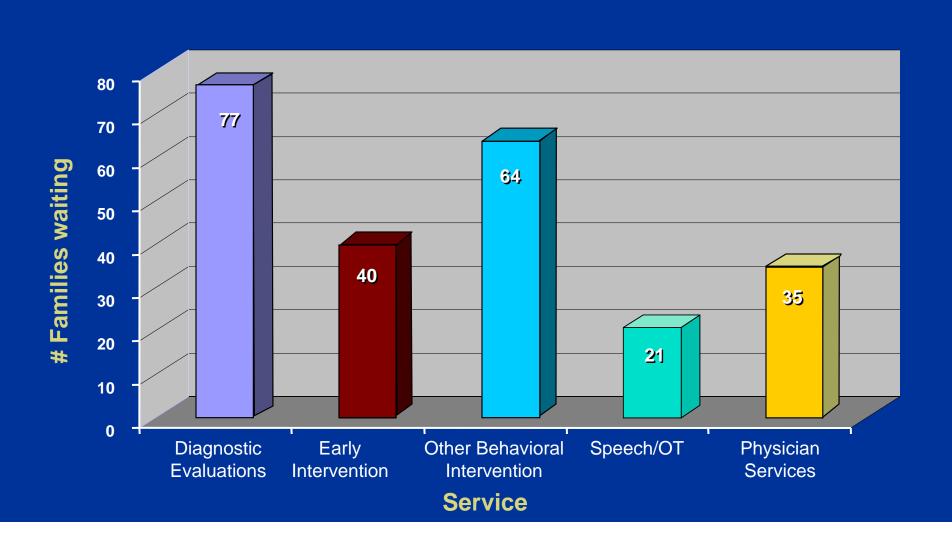
### **Curriculum Domains**

- Receptive language
- Expressive language
- Joint attention
- Social interaction
- Fine motor
- Gross motor

- Imitation
- Cognition
- Play
- Independence
  - Eating
  - Dressing
  - Grooming

# Despite progress, hundreds of families on waiting list!

June 30, 2004



### Building capacity through training

#### Center trainees

- Neurology and pediatric resident training
- Postdoctoral clinical psychology fellowships
- Occupational therapy student training
- Psychology graduate student practicum
- Early intervention therapists

### Community training

- Summer intensive program (85 individuals)
- School professionals practicum
- Educational programs at middle and high school level
- Workshops and in-service training

# Technical Support Provided to Community

- Schools, Birth-to-Three Centers, pediatric practices, and other health agencies requesting information/training about screening, diagnosis, medical care, and developing/refining school-based programs
- Technical support includes:
  - On-site observation and consultation
  - Established mechanisms for additional consultation and support as needed
  - Efficient dissemination of up-to-date researchbased best practices

### **Technical Support: Examples**

#### **School Districts**

- Bainbridge Island
- •Bellevue
- Bethel
- Lake Washington
- Mercer Island
- •Issaquah
- Olympia
- Clover Park
- Vancouver
- **Birth to Three Centers**
- Kindering Center
- St. Johns Preschool
- Boyer Children's Center

- Lake Stevens
- Northshore
- Puyallup
- Renton
- Sumner
- Tahoma
- University Place

#### Other Agencies

- Yakima Speech and Hearing
- •Hearing, Speech, and Deafness Center of Seattle
- Autism Outreach Project
- •CHILD school
- New Horizons
- Several Pediatric Practices

# Training and Information: Demonstrated Need

- During the past year, Autism Center staff responded to over 7,000 phone calls from professionals and prarents requesting information about autism
- Requests come not only from local south sound and Seattle area residents, but from residents across the state of Washington who are interested in information on autism, including resources available in their areas
- Many more families, teachers, and other professionals are seeking training than we are currently able to serve

# 3-step plan for addressing the needs of Washington State families

- Replicate UW Autism Center's success by creating regional centers in 3 other locations
- Implement state-wide professional training program, leveraging financial and technical resources already existing in UW Autism Center and UW Professional Development in Autism Center
- Approve state insurance coverage for early intervention

## State-wide model for providing training and clinical services

#### **University of Washington-Seattle/Tacoma**

- Implement state-wide professional training program
- Provide technical assistance to other regional centers
- Provide regional technical assistance to community
- Provide regional diagnostic and treatment services

#### **Regional Center #3**

Regional technical assistance to community

 Regional diagnostic and treatment services

#### **Regional Center #4**

Regional Technical Assistance

Regional
 Diagnostic and treatment services

#### **Regional Center #5**

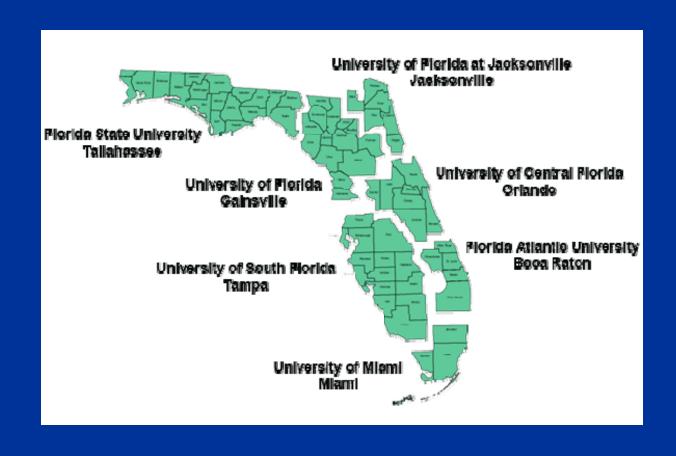
Regional Technical Assistance

 Regional Diagnostic and treatment services

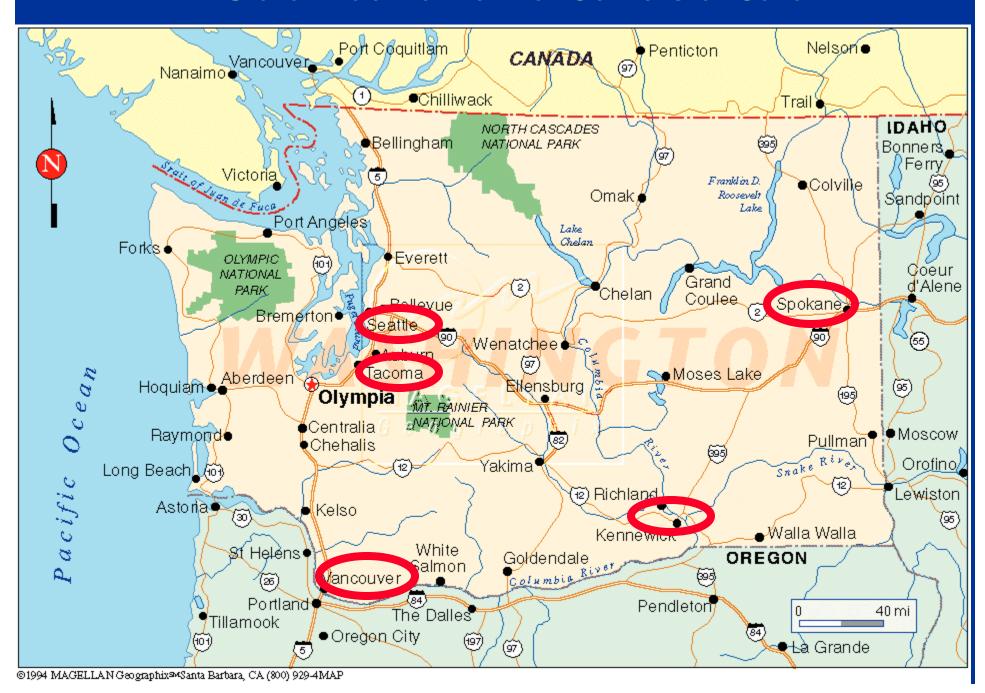
### Factors to consider in locating centers

- Population base
- Geographic location
- Existing resources (people, space)
- Proximity to state universities (e.g., WSU, UW)

# Florida: Centers for Autism and Related Disorders



#### **State-wide Network of Centers of Care**



# Statewide Training Program: Vision

- Utilize UW technology resources, including:
  - Web-based distance learning
  - Telemedicine capability
  - K-20 interactive telecommunications network
- Provide direct training by UW staff traveling to sites

# Statewide Training Program: Vision (con't)

- Enhance website to provide information on early detection, treatment, and research findings to the public and to health care professionals
- Create and disseminate PDFs, informational videos, brochures, and newsletters to provide up-to-date information to parents and professionals
- Enhance infrastructure to expand and improve our response to phone, email, and written requests for information and referrals

# Statewide Training Program: Vision (con't)

- Offer state-wide workshops and in-service training to birth-to-three centers, schools, community agencies, and mental health settings, focusing on the needs of individuals with autism from infancy through adulthood
- Offer an expanded summer intensive training course for parents and professionals that could accommodate parents and teachers from throughout the state
- Develop web-based interactive "webinars" that would allow remote access and direct participation in courses offered by UW staff, including the summer intensive course, through the existing K-20 line

## State-wide model for training and clinical services: 5 Centers Total annual cost estimate: approx. \$1.65 million

University of Washington-Seattle/Tacoma Regional Center #1 Seattle -0-Regional Center #2 Tacoma \$400K State-wide professional training \$500K

**Regional Center #3** 

\$250K

**Regional Center #4** 

\$250K

**Regional Center #5** 

\$250K

## State-wide model for training and clinical services: 4 Centers Total annual cost estimate: approx. \$1.3 million

University of Washington-Seattle/Tacoma Regional Center #1 Seattle -0-Regional Center #2 Tacoma \$400K State-wide professional training \$400K

Regional Center # 3

\$250K

**Regional Center #4** 

\$250K

### Cost-benefit perspective

- For each child receiving appropriate intervention, cost-savings is \$200,000 by age 18 years and \$1,000,000 by adulthood.
- \$1,300,000 annual cost quickly compensated from savings to schools and other state agencies.